

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

1. (Currently Amended) An HVAC controller comprising:
two or more switches that control one or more HVAC control parameters;
a movable member;
a first plurality of detents, wherein the first plurality of detents are configured to cause the two or more switches to be switched in a sequence when the movable member is moved; and
wherein the movable member further includes a second plurality of detents configured to engage one or more detent engagement members to selectively fix a position of the movable member at one of a plurality of positions.
2. (Previously Presented) The HVAC controller according to claim 1 further comprising:
a controller coupled to the two or more switches for changing an HVAC control parameter based on the sequence that the two or more switches are switched.
3. (Previously Presented) The HVAC controller according to claim 1, wherein the two or more switches include three or more switches.
4. (Cancel)
5. (Previously Presented) The HVAC controller according to claim 1, wherein one or more of the switches are mechanical switches.
6. (Currently Amended) An ~~The~~ HVAC controller ~~according to claim 1,~~
comprising:
two or more switches that control one or more HVAC parameters, wherein one or more of the switches are optical switches;

a movable member; and
a first plurality of detents, wherein the first plurality of detents are configured to cause the two or more switches to be switched in a sequence when the movable member is moved.

7. (Currently Amended) ~~An~~ The HVAC controller according to claim 1, comprising:
two or more switches that control one or more HVAC parameters;
a movable member; and
a first plurality of detents, wherein the first plurality of detents are configured to cause the two or more switches to be switched in a sequence when the movable member is moved;
wherein the two or more switches are positioned such that the first plurality of detents activate the two or more switches out of phase relative to one another.

8. (Currently Amended) ~~An~~ The HVAC controller according to claim 1, comprising:
two or more switches that control one or more HVAC parameters;
a movable member; and
a first plurality of detents, wherein the first plurality of detents are configured to cause the two or more switches to be switched in a sequence when the movable member is moved;
wherein the two or more switches are positioned such that the first plurality of detents activate the switches 90 degrees out of phase relative to one another.

9. (Previously Presented) The HVAC controller according to claim 1, wherein the two or more switches are positioned such that the first plurality of detents activate the switches in one of four or more possible switch combinations.

10. (Currently Amended) ~~An~~ The HVAC controller of claim 1 comprising:
two or more switches that control one or more HVAC parameters;
a movable member; and
a first plurality of detents, wherein the first plurality of detents are configured to cause the two or more switches to be switched in a sequence when the movable member is moved, and

a first plurality of detents, wherein the first plurality of detents are configured to cause the two or more switches to be switched in a sequence when the movable member is moved, and wherein the first plurality of detents have a first detent pattern,~~the HVAC controller further comprising:~~

a second plurality of detents having a second detent pattern;

a member adapted to move relative to the first and second plurality of detents;

a first detent engagement member fixed relative to the member and adapted to effect one or more sensing means that control one or more parameter settings based on the position of the first detent engagement member relative to the first plurality of detents; and

a second detent engagement member fixed relative to the member and adapted to slide along the second plurality of detents to selectively fix the position of the member at one of a plurality of positions.

11. (Previously Presented) The HVAC controller according to claim 10, wherein the sensing means include two or more switches.

12. (Original) The HVAC controller according to claim 10, wherein the second detent engagement member includes a plurality of second detent engagement members.

13. (Original) The HVAC controller according to claim 10, wherein the first detent engagement member includes a plurality of first detent engagement members.

14. (Original) The HVAC controller according to claim 10, wherein the first detent pattern is different than the second detent pattern.

15. (Currently Amended) An ~~The~~ HVAC controller ~~of claim 1~~ comprising:
two or more switches that control one or more HVAC parameters, wherein the two or more switches include a first detent switch and a second detent switch,~~the HVAC controller further comprising:~~

a movable member;

a first plurality of detents, wherein the first plurality of detents are configured to cause the two or more switches to be switched in a sequence when the movable member is moved;

a first detent tab adjacent the first detent switch and a second detent tab adjacent the second detent switch; and

a first detent ring having the first plurality of detents, the first detent ring extending in rotational engagement with the first detent tab and the second detent tab;

wherein, rotational movement of the first detent ring relative to the first and second detent tabs, is adapted to selectively deflect the first detent tab to activate the first detent switch and to selectively deflect the second detent tab to activate the second detent switch.

16. (Original) The HVAC controller according to claim 15, further comprising a second detent ring extending in rotational engagement with a detent engagement member and adjacent the first detent ring, the second detent ring selectively fixing the position of the first detent ring at one of a plurality of positions.

17. (Original) The HVAC controller according to claim 16, wherein the first detent ring has a first detent pattern, the second detent ring has a second detent pattern, wherein the first detent pattern is different than the second detent pattern.

18-67. (Cancel)

68. (Previously Presented) The HVAC controller of claim 77 wherein the controller is adapted to adjust the displayed second HVAC parameter when the movable member is further moved.

69. (Previously Presented) The HVAC controller of claim 68 wherein the movable member is moved rotationally, and wherein the second HVAC parameter value is increased when the movable member is rotated in a first direction, and is decreased when the movable member is rotated in a second direction.

70. (Previously Presented) The HVAC controller of claim 69 wherein the movable member is a rotatable interface member having a plurality of detents.

71. (Previously Presented) A method for causing two or more switches to be switched in a sequence, the method comprising:

providing two or more switches;

providing a movable member;

providing a plurality of detents, wherein the plurality of detents are configured to engage the two or more switches in a predetermined sequence when the movable member is moved, wherein each switch is engaged by a different one of the plurality of detents; and

moving the movable member to cause the two or more switches to be switched in the predetermined sequence, wherein the moving step includes sliding the movable member.

72. (Previously Presented) The method of claim 71 wherein the moving step includes rotating the movable member.

73 - 74. (Cancel)

75. (Previously Presented) The method of claim 78 further comprising:
adjusting the second parameter on the display after the movable member is further moved.

76. (Cancel)

77. (Previously Presented) An HVAC controller comprising:
two or more switches;
a movable member;
a first plurality of detents, wherein the first plurality of detents are configured to cause the two or more switches to be switched in a sequence when the movable member is moved;
a display; and

a controller, wherein the controller receives signals from the two or more switches, and is adapted to initially display a first HVAC parameter on the display, and once the movable member is moved, to display a second HVAC parameter on the display.

78. (Previously Presented) A method for displaying a first parameter and then a second parameter on a display, the method comprising:

providing two or more switches;

providing a movable member;

providing a plurality of detents, wherein the plurality of detents are configured to engage the two or more switches in a predetermined sequence when the movable member is moved;

moving the movable member to cause the two or more switches to be switched in the predetermined sequence;

displaying a first parameter on the display; and

displaying a second parameter on the display after the movable member is moved.

79. (Previously Presented) The method of claim 78 wherein the display is part of an HVAC controller, and the first parameter is a first HVAC parameter and the second parameter is a second HVAC parameter.

80. (Previously Presented) The method of claim 79 wherein the first HVAC parameter is a temperature set point value.

81. (Previously Presented) The method of claim 79 wherein the first HVAC parameter is a current temperature value.

82. (Previously Presented) The method of claim 81 wherein the second HVAC parameter is a temperature set point value.

83. (Previously Presented) A method for adjusting a control parameter using a display, the method comprising:

- providing two or more switches;
- providing a movable member;
- providing a plurality of detents, wherein the plurality of detents are configured to engage the two or more switches in a predetermined sequence when the movable member is moved;
- moving the movable member to cause the two or more switches to be switched in the predetermined sequence;
- displaying a first parameter on the display; and
- adjusting the first parameter on the display after the movable member is moved.

84. (Previously Presented) The method of claim 83 wherein the display is part of an HVAC controller, and the first parameter is an HVAC parameter.

85. (Previously Presented) The method of claim 84 wherein the HVAC parameter is a temperature set point value.

86. (Previously Presented) The method of claim 84 wherein the HVAC parameter is a time parameter.

87. (New) An HVAC controller for use by a user, the HVAC controller adapted to provide one or more control signals to an HVAC system, the HVAC controller comprising:

- a movable member adapted to be moved by the user;
- two or more switches that are adapted to indicate a change in one or more control parameters of the HVAC controller;
- a first plurality of detents, wherein the first plurality of detents are configured to cause the two or more switches to be switched in a sequence when the movable member is moved by the user, and the HVAC controller is adapted to change a value of one or more control parameters

based on the sequence that the two or more switches are switched when the movable member is moved by the user.

88. (New) The HVAC controller of claim 87 further comprising a display, wherein after the HVAC controller changes the value of one or more control parameters based on the sequence that the two or more switches are switched, the value of one or more changed control parameters is/are displayed on the display.

88. (New) The HVAC controller of claim 87 wherein, after the HVAC controller changes the value of one or more control parameters based on the sequence that the two or more switches are switched, the HVAC controller begins to control the HVAC system using the value of the one or more changed control parameters.

89. (New) The HVAC controller of claim 87 wherein the one or more control parameters affect the one or more control signals that are provided by the HVAC controller to the HVAC system.

90. (New) A thermostat for providing one or more control signals to an HVAC system of a building, wherein the HVAC system is adapted to control one or more environmental conditions inside of the building, the thermostat comprising:

a movable member adapted to be moved by a user;
two or more switches that are adapted to indicate a change in one or more control parameters of the thermostat;

a plurality of detents, wherein the plurality of detents are configured to cause the two or more switches to be switched in a sequence when the movable member is moved by the user, and the thermostat is adapted to change a value of one or more control parameters based on the sequence that the two or more switches are switched.

91. (New) A method for causing two or more switches to be switched in a sequence, the method comprising:

providing two or more switches;

providing a movable member, wherein the movable member includes a first series of detents that extend in a pattern along an arc, wherein when the movable member is moved, the two or more switches move along the arc of the first series of detents such that the two or more switches engage the first series of detents in a predetermined sequence; and

moving the movable member to cause the two or more switches to be switched in the predetermined sequence.

92. (New) The method of claim 91 wherein the moving step includes rotating the movable member about an axis.

93. (New) A method for changing a value of a parameter of an HVAC controller, the method comprising:

providing two or more switches;

providing a movable member, wherein the movable member includes a first series of detents that extend in a first detent pattern, wherein when the movable member is moved, the two or more switches move along the first detent pattern such that the two or more switches engage the first series of detents in a predetermined sequence;

moving the movable member to cause the two or more switches to be switched in at least part of the predetermined sequence; and

changing a value of the parameter of the HVAC controller based on the sequence that the two or more switches are switched when the movable member is moved.